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ABSTRACT

A major goal of schools should be to develop self-directed people with knowledge, skills, and attitudes for fully functioning future living. More specifically, schools must seek to provide education in the areas of: (1) citizenship, everyday living, and personal growth; (2) skill development relating to problem solving, decision-making, research, interpersonal relations, communication, and personal reflection; and (3) attitudes concerning personal causation, science, self-acceptance and self-growth, and caring. Schools can and should begin to conceptualize their future living programs by establishing goal priorities and then deciding in what ways goals can be implemented at different grade levels and in different classrooms. (DS)

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Planning Schooling For Future Living

By

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Predicting the future is, of course, fraught with difficulties. There are those who believe that the future holds the promise of rosy and glowing technological and social progress.[1] In this scenario, we will overcome our pressing problems through technological innovation, and be able to adequately support increasing populations on earth. In the United States, life will go on as it does today for most middle and upper-middle class Americans, except that more people will be able to enjoy the fruits of technological progress. There will be increasing benefits from technological progress. People will increasingly be in white collar, service-oriented jobs.

Another scenario is extremely pessimistic.[2] In this view, the world's problems will not be solved and the peoples of the earth will increasingly turn to war and other negative means to solve conflicts. The earth's resources will continue to be depleted and become more limited. Energy will become a more serious problem, and other energy sources will not be found in time. Increasingly abundant lifestyles will gradually be reduced. People's lives will change dramatically, with the quality of life deteriorating.

Amidst these two scenarios are many others. Some advocate, for example, that if we can move to a simpler lifestyle today, our future will certainly be more positive.[3] Others see an increasingly interdependent earth.[4] One recent prediction suggests that we will find the means to reduce or eliminate the aging process, and thus become nearly immortal.[5]

These views and predictions are helpful in projecting ideas and scenarios for the future. But they are not the future. They are future <u>possibilities</u>. They will or will not occur, depending in part on what people do or do not do. The future will probably be guided by people's actions or lack of actions and their effects on what happens in the future. For example, many believe that a future war is inevitable, but it is in fact the actions of individuals and nations that will cause war to happen. As Cornish states, the future is often a

series of gradual events accumulating over many years to produce or solve problems.[6] If, for example, the Soviet Union and United States agree on a nuclear arms treaty that greatly reduces arms spending and the arms race, then this would have a profound effect on the potential for war and on the economy of the world. If during the next ten years there are serious efforts in the United States to each year reduce oil and other energy consumption and begin instituting sunpower and other simpler forms of energy, then our energy problems could be very different in the future. It will be our decisions both individually and collectively that will influence and help determine how we will live in the future.

A major goal of education is to prepare students for future living. Schools, as the major educational force in the public sector, have both the obligation and the responsibility to provide students with the training necessary to allow them to lead fulfilling lives in the future. If we accept the fact that people can play a major role in what happens in the future, then it is imperative that schools train students with knowledge, skills and attitudes to help them build their own future world. The decisions they make will in part be based on the training they get in schools. Schools should help students learn to become competent for future living.

Schools have, in the past, focussed on the concept of "literacy". Literacy has traditionally meant becoming competent in basic reading, comprehension and writing skills.Currently there is a major focus on these basic academic competencies, even though most students in the United States have achieved basic literacy skills in schools today. In today's world, the concept of literacy requires expansion to also include other competencies necessary for future living. Reading and writing are certainly basic and important literacy skills, but there are other, equally important areas that are prerequisites for future living. Competency for future

living requires many types of knowledge, skills and attitudes that are not adequately focussed on in the school curriculum. Most schools have not systematically attempted to develop a more comprehensive program for a future living education.

I believe that a major goal of schools should be to develop self-directed people with knowledge, skills and attitudes for fully functioning future living. Self-directed people are those who believe that they can have some control over their own lives and who have learned knowledge, skills and attitudes helpful for full future functioning. They have a knowledge base for citizen involvement, for dealing with everyday issues and problems, and for personal growth and development. They can think and reason, make decisions and solve problems, work with others, communicate adequately, and reflect on and assess their own lives. Future living attitudes include a "scientific" attitude -- for example, looking for evidence to support conclusions, keeping an open mind, questioning ideas, allowing dissent. People with future living attitudes believe they are "O.K." people, believe that they can and will grow and learn. They think about the present and the future. They care not only about themselves but also about others.

Self-directing people represent "ideal types" who can direct their own lives and fully function both in the present and the future. Such people can adapt to and change situations and events. They have at their core a set of knowledge, skills and attitudes that aid them in choosing future lifestyles and in determining their futures. Schools can play a major role in educating for future living by providing knowledge, teaching skills, and fostering attitudes for future living competence. Schools need to develop a systematic framework, one that can be used to develop self-directing people through a systematic program of instruction for future living. This paper will focus on knowledge, skill and attitude frameworks for future living instruction, and how they might be incorporated in the school instructional program.

Providing knowledge for future living

A fundamental, sound knowledge base is a critical component of a future living education. Knowledge for future living can aid the citizen in influencing political decisions. Whom to vote for, what letters to write, what groups to join, what positions to take -- these decisions depend on adequate knowledge. Since the future will be determined in part through the political arena, this is critical knowledge for future living.

Everyday living decisions also depends on knowledge. Complex career decisions are best made with knowledge of choices. Lifestyles are best made when the alternatives are known. Consumer decisions depend on adequate knowledge.

Knowledge about psychological concepts, about one's strengths and weaknesses, about one's abilities, about one's emotions -- all these are helpful in personal growth, an important area for future living.

Citizenship Knowledge

Future living will require active citizens who take part in decision-making processes. Active citizenship requires knowledge, and there are important areas of knowledge that will help citizens play a role in what happens to them in the future. For example, here are some areas of knowledge that are important for citizenship education:

1. Science and technology. Science and technology currently play too small a role in the education of our youth. We are, from all appearances, training scientific and technological illiterates. Part of the problem stems from rapid technological change that we as adults have not had time to absorb and learn about. Partly, the problem stems from an overemphasis on teaching concepts from the sciences (biology, physics, etc.) and a lack of emphasis on the role of science and technology in modern life. Yet science and technology knowledge is heavily related to critical future living issues,

such as energy development, pollution, transportation, medical advances, and so on. Students should learn scientific and technological knowledge as related to future living problems, and these include the biological and physical sciences as well as other areas. Students should be exposed to the workings of science and technology through, for example, tinkering with and understanding how some of our modern gadgets work. They should work with tools. They should learn about recent inventions, the effects of inventions, etc. Schools should much more systematically teach students knowledge about scientific areas and about technological advances.

2. Democratic heritage. Our democracy stresses the concept of human dignity and allows for personal participation in the political process. In a complex, industrial society, many people feel that they are limited in their ability to participate. I believe that it is possible to influence public policy, and the ability to do so has long been supported by individuals and groups who participate on a regular basis. Students need to learn about democratic system of government in a realistic way. They need to learn about dedicated political figures who have affected the course of events. They need to learn at an early age about rights and responsibilities, about local government, about power and authority, about our legal system, laws and changes in laws. As students get older, they need to learn about state and federal government and about the realities of political participation.

3. An interdependent world. Information about an increasingly interdependent world is necessary for an analysis of future living issues. Technological advances have made travel to the farther corners of the globe possible and changed perceptions of time and space. Industrial society has increasingly made for an interdependent world economy, in which goods and services are transported in ever increasing numbers. It is important to learn about people in

other cultures and countries, their relations with us, economic resources and their distribution, and so on.

4. Problems and issues. Schools should systematically focus on problems and issues for the future. Knowledge about problems and issues can help students form opinions as well as reasons and evidence for points of view. Information about the environment, about medical dilemmas (such as whether to spend a great deal of money for expensive equipment that may save some lives) about issues of war and peace, about computers, about energy questions, about issues of privacy and invasion of privacy, about government involvement in social issues, about dwindling resources, about cities, and so on, can be taught by direct discussion of issues. These problems and issues can be a significant source of curriculum and can change as the issues change.

Everyday Living Knowledge

Future living requires knowledge that will help in everyday living. Current trends suggest a future world that is more complex, with more choices and more daily living knowledge necessary. Basic survival information such as health care, first aid and cooking can help students with everyday living. Currently students have to make complex career decisions and consumer decisions. What to do with leisure time is another important area of everyday living. The trend towards more contact with a greater variety of people requires better understanding of others. And, finally, everyday living in the future will allow for greater choice among diverse lifestyles. Knowledge in all these areas will aid in future living.

1. Survival information. Most of us, in a technological society such as ours, have moved away from learning and using basic survival information. Foods are bought prepackaged and frozen. Environments safe and secure from the ravages of nature are the rule. Hospitals are available by the touch of a dial. Yet people

still find that basic survival information is important. Many people are turning to growing their own vegetables and cooking more nutritious meals. Camping has become more popular, and there is a movement toward more natural living. First-aid knowledge, properly used, can help save many lives.

Survival knowledge includes learning about cooking and growing foods. It includes basic information about preventive health care and the human body. First-aid information is important and useful. Information about survival in natural environments is important.[7]

2. Consumer and career education. In an increasingly complex world, career choices become more complex. It is estimated that today's children will be changing jobs more frequently. There are more increasingly specialized jobs from which to choose. Thousands upon thousands of choices are available. Yet it is surprising how little students learn about alternative careers. Time and time again the author has spoken with teachers and children about careers and has been amazed at the lack of information children have about available career choices. It is extremely important that students have the opportunity to learn about a wide variety of careers and occupations--what people do, how they do it, what their lifestyles are.

Consumer information is also important. More and more we are being bombarded with multiple choices among foods, clothing, appliances, etc. Children are subjected to massive advertising campaigns designed to increase their consumption of nutritionally empty foods. Massive advertising occurs for cigarettes, color televisions, and so on. It is important for students to have knowledge that will help them make better consumer choices, including information on nutrition, harmful products, ratings of appliances, advertising techniques, and so on.

3. Leisure time. Knowledge of choices for leisure time activities is also helpful. The more knowledge of varieties of leisure time activities, the more choices

available. I personally believe that schools should help students learn enjoyable leisure time experiences that are also productive for growth and development. These include reading for pleasure, arts and crafts projects, music, games, political activity, clubs, nature activities, sports, exercise and meditation, relaxation techniques, and so on.

4. Alternative lifestyles. It is important that students have knowledge of alternative lifestyles.[8] The future will probably provide students with greater options for future living. People will have such options as whether to live in rural, suburban or urban settings. They will have choices about what part of the country to live in. Many people may turn to other types of alternatives, such as communal life styles in cities and on farms, religious retreats, groups of families and friends that live in close proximity to one another and share enjoyable experiences, and so on. Schools should provide students with knowledge and understanding of these alternatives.

5. Human understanding. Everyday living requires students to learn to get along with a variety of peoples. Students can be aided in this process by knowledge of human behavior in individual and group settings. Psychological concepts and ideas help to provide students with such knowledge.[9] Learning about different peoples, cultures and groups helps students to understand why people are different and how they are similar.

Personal Growth Knowledge

Future living is enhanced when people feel confident about themselves, when they are at high levels of personal self-actualization. While contributions to this state are primarily made on the affective level, it is also true that knowledge can aid in personal growth and development. For example, humanistic psychologists have developed a theory of human psychology based on human needs and self-actualization.[10] Knowledge of human needs, the need for rest and activity,

the need for safety and security, the need to belong and be loved, the need for self-esteem, and so on can help students analyze their own problems and deal with personal issues and crises. Transactional analysts have developed theoretical perspectives about human growth, focussing on the parent, adult, and child within us.[11] Books have been written to help children understand these concepts and apply them to everyday living.[12] Lawrence Kohlberg and others have focussed on moral development and on stages of moral reasoning as part of the human development process. Students can learn about different stages of moral reasoning.[13] Knowledge of human psychology can aid students in their personal growth and development.

Personal growth is also enhanced when schools present a variety of case studies of individuals who exemplify our highest values. Maslow, for example, suggests that we can learn much about the best qualities of human beings through the study of "self-actualized" people, who exhibit traits associated with our highest values.[14] Political, social, career, educational, etc. models can be presented through literature, books, newspapers, etc. Alternative life styles can be illustrated through such individuals. Thousands of individual examples are available, from famous historical figures to current men and women in all walks of life. Students can read about and study about dedicated, honest, resiliant men and women with the courage of their convictions.[15] Case studies are particularly important in developing personal control and caring attitudes (see attitudes section of this paper), exemplifying individuals whose actions made a difference in their own and other's lives and who showed care and concern for others. Case studies can also illustrate human qualities and skills such as perseverance, acceptance of failure, personal decision-making, human emotion, and the like that relate to future living.

Skills for Future Living

We do not know exactly what the future has in store for us, but each day people face problems and issues that require skillful solutions. Skills are

also important in everyday living. We can predict a number of skill areas that are critical for future living -- intellectual skills, action skills, technical skills and so on. For example, thinking, creative problem-solving and decision-making skills are critical for future living. People need to know "how to learn" -- for example, how to find out necessary information, how to research, how to draw conclusions, and how to ask questions. An interdependent world necessitates skillful relating and interacting. Learning how to communicate with others through basic literacy skills and other self-expression skills is important. The continual ability to personally reflect on and assess one's own life in a complex world aids students in living full and effective lives. Technical, "hands-on" skills help people live in an increasingly technical world.

Thinking, Problem-Solving and Decision-Making Skills

Schools can help students learn to think, solve problems and make decisions in more effective ways. I often find that schools do not stress these skills, yet they are crucial for effective living. They probably will become more crucial in a more complex world.

Thinking skills can be taught in many different ways. Taba and others have outlined many types of thinking skills that can be developed with children, among them classification skills for concept development, interpretation of data skills, drawing conclusions, applying generalizations, and so on.[16] Many curricula programs now stress the development of thinking skills, among them Taba's own social studies program.[17] Schools can stress helping children classify data, interpret knowledge, draw conclusions, and so on, on a regular basis.[18]

Students can also learn skills to aid them in creative problem-solving. Noller, Parnes and Biondi, for example, outline a five step creative problem. Solving process:

1. fact-finding: gathering and analyzing data in preparation for defining the problem.

2. Problem-finding: analyzing problematic areas in order to pick out and point up the problem to be attacked.

3. Idea-finding: idea production -- thinking up, processing, and developing numerous possible leads to solution.

4. Solution-finding: evaluating potential solutions against defined criteria.

5. Acceptance-finding: adoption - developing a plan of action and implementing the chosen solution.[19]

Their program is designed to provide students with exercises that allow them to stretch their creative problem-solving muscles and practice using this five-step approac

Other programs provide similar skill development. For example, the Productive Thinking Program is a systematic program based on mystery stories designed to provide students with enjoyable learning exercises in which they can practice problem-solving skills.[20] Making It Strange and Strange and Familiar are parts of a program using metaphorical, analogous thinking as a way to stretch associative and creative thinking processes.[21]

Decision-making skills are important for future living. Decision-making skills help students learn a process for solving future living issues. Fair outlines some of the stages and skills required in the decision-making process:[22]

STAGES	SKILLS IN THINKING
1. Recognizing and clarifying the decision to be made, the issues to be decided.	Bringing knowledge to bear on the situation. Simple analysis of the situation, raising questions.
2. Proposing alternatives, two or more courses which might be chosen.	Analysis in the sense of identifying key concepts, issues, value conflicts. Synthesis in the sense of proposing hypothetical courses of action.
3. Tracing the probable consequences of each of the alternatives.	Interpreting data. Analyzing data. Developing requisite concepts and generalizations. Application in the sense of projecting or predicting consequences for each alternative.
4. Recognizing values at stake and evaluating consequences.	Evaluation of each set of consequences. Prioritizing and qualifying values.
5. Settling upon a choice, ready to follow as the occasion requires.	Evaluation as making the judgment. Application.

Practicing decision-making skills requires that students frequently be given decisions to solve that require solution. Many curricula materials currently in use in the schools can be developed into problems requiring decisions. Case studies and dilemma situations, for example, can be presented to students. In studying the American Revolution, for example, a hypothetical situation can be presented in which a young boy has to decide which side to support. Other historical periods can be used to present dilemmas that enable students to practice decision-making skills. Future studies courses can focus on problems and dilemmas requiring thought and decision, in which students can practice decision-making skills outlined above. Specific curriculum materials have been designed to focus on solving dilemmas and learning decision-making skills.[23] Other sources, such as those for values clarification, also have developed ways to develop decision-making skills.[24]

Research Skills

It is not difficult to imagine citizens of the future making complex decisions and acting on them, whether through their vote or through more direct action. Making such complex decisions, however, requires them to be able to find and translate information into a usable basis. While it is possible that retrieval information systems will be easier to use in the future, research skills will still be needed to be able to collect appropriate and accurate information. Students, therefore, should learn to conduct research and learn the skills for research, including using library catalogues, outlining information, using a variety of sources, checking on the reliability of information, evaluating information, and so on.

Relating and Interacting Skills

Learning to relate to and interact with all kinds of peoples is important in a fast shrinking world. Schools can aid in this development by promoting classrooms

in which students practice relating and interacting skills. Many teachers use a technique called classroom meetings to help students learn to interact with each other. Classroom meetings are large group meetings in which students have a chance to listen to each other's problems, to think and reason together, to solve problems together. Often classroom meetings involve problems of human relationships, such as problems on the playground, classroom problems and so on. This technique, practiced regularly, can help students learn to relate to each other.

Group process and group dynamic activities are also helpful. Many techniques have been developed to help students learn about human relationships. Small group activities in which students work together on tasks and then analyze their relationships can help students focus on relating issues and problems.[25] Specific tasks can help students explore feelings of trust and distrust[26], intergroup conflict[27], unequal power[28], and other concepts and issues. Issues in solving conflicts peacefully and skills in practicing peaceful conflict resolution can be explored.[29] Parent and Teacher Effectiveness Training approaches provide a conceptual model for learning how to listen to others, for learning how to solve problems to the mutual satisfaction of all concerned. These can be taught to students as well as adults.[30] These skills, coupled with an understanding of similarities and differences between many different kinds of peoples and cultures, can provide a basis for tolerance and acceptance of others and open the way towards more positive interactions and relationships with others.

Communication Skills

There are many skills under the heading of communication skills that are useful to learn for future living. Basic communication skills, such as reading, oral expression, comprehension and writing are in this category. However, basic listening and discussion skills are also important. Schools can focus on

ways that students can argue rationally with each other, such as through the ability to examine one's own and other's arguments. Students can learn to arrive at consensus and clarify issues, rather than argue and debate with the idea of "winning" the argument.[31] Schools ought to spend a lot more time having students practice discussion skills, learning to focus on differences and disagreements, learning to work together to brainstorm alternative solutions to problems, and so on.

Students can also learn many forms of self-expression designed to communicate ideas and feelings. It is important for students to learn skills related to self-expression through many mediums, such as painting, clay, weaving, and so on. These skills as forms of self-expression are important to all ages, and we should not abandon them in schools. They are useful skills to learn both for communication of feelings and ideas and for leisure time and potential career activities to be pursued later in life.

Personal Reflection and Assessment Skills

It is important for students to learn to personally reflect and assess their lives on a regular basis. Often we take it for granted that people know how to do this, but there is, in fact, a great deal of training and education that can help people learn these skills. To use an analogy, people think that parenting is a natural skill, but there are many people who simply have not learned parenting skills, and can be trained to take better care of their children. Personal reflection and assessment skills can be explored in school settings.

Many specific skills fall under this category. For example, it's useful to help students learn how to set goals and focus on actions necessary to attain those goals.[32] Goal setting can focus on feelings of success and failure, on small steps necessary to reach goals, on goal alternatives, on long range and short range goals and so on.[33] Other skills include becoming aware of and

learning to focus on one's talents and strengths. Learning skills to help clarify one's values is important.[34] Still others are learning to seek help and to problem-solve personal dilimmas.

Technical Skills

More and more our world revolves around technology, and it appears as if this trend will continue. Technological developments, in computers, mass production and automation, new forms of energy, electronics and communications, and so on are continuing and accelerating. Skills in working with different forms of technologies are thus useful and important.

Technical skills provide students with the means to work with the technological products of our society. Such skills are many and varied, and may include the ability to repair household items, television sets, cars and the like as well as the building of solar energy devices, new homes and computers. Technical skills enable one to work with one's hands, to make and build using a variety of tools, to understand technical information, and so on.

I believe that this is one of the most neglected areas of the school curriculum. I know that I learned very few technical skills in school, and certainly very few related to new technologies. Yet these skills are extremely important for future living. The school curriculum should include the learning of varied technical skills. Young children, for example, should learn to work with simple tools. Older students can learn about simple electronic items, how they work, precautions to take with them, and even how to make simple repairs. Students can learn about the workings of such important, complex items as computers and automobiles. They should learn about energy, including new, alternative forms of energy production, and the skills of producing simple energy devices.

Developing Attitudes

It is important for schools to help develop certain attitudes for future

living. First, schools should help students develop a most important attitude - that they can have some control over their lives, that they cause things to happen that affect their lives. This attitude is important if students are to act so as to help create changes in the world that will benefit themselves and others. Second, students need to develop a "scientific" attitude about the world around them. A scientific attitude includes, among other things, searching for truth, questioning conclusions, and developing a favorable attitude towards intellectual endeavors. Third, students need to develop an attitude of self-acceptance and self-growth over time. They need to see themselves as capable and lovable individuals with human frailties and human strengths. They need to accept the fact that they will always be growing and searching. Fourth, students need to learn to think about both the present and the future as well as the past. They need to be willing to speculate about the future and see such speculation as worthwhile and important. Finally, they need to develop a "caring" quality. They need to learn to care about others and themselves and about what happens to them.

"Personal Causation" Attitude

There is, I believe, a basic underlying attitude called "personal causation" that is important for future living.[35] People with this attitude believe that in many situations they can control what happens to them. It is a personal feeling that one can act to change situations for one's own self-fulfillment. Many people who have this attitude do not necessarily always find themselves in situations that they can control. But with this attitude they are able to accept frustration and even failure and still expect that changes can or will be made. Many people who lived in and survived concentration camps in Germany did so because they were able to feel in control of their internal situation to some extent and inwardly maintain a degree of integrity and self-respect.[36]

Many well-known political and religious leaders, educators, scientists, businesspeople, and so on believe that they can personally cause things to happen and act accordingly. Many others act in similar ways in their everyday lives, their careers, their lifestyles. People with this attitude are persistent and do not readily accept failure. They have goals. Often they have faith in others and a positive view of themselves and others. They believe that their actions, over the long haul, can influence the course of events that affect their lives.

The importance of this attitude cannot be stressed too strongly. It is assumed here that people can significantly affect future events and therefore future living. If we hold the basic attitude that we cannot change the course of events, then our attitude, I believe, produces a self-fulfilling prophecy. We do not act to change the course of events, and therefore events do not change. This does not mean that the course of events changes easily, simply because we believe we can change it. Rather, the assumption is that the effects of many will make many changes that will affect our future lives. It is when we believe we can act to affect our lives and the future that changes are most likely to occur. Changes are not likely to occur if we do not act because we believe there's no hope of change. The "personal causation" attitude is especially important in a democratic society such as ours where options for change are open to us both as citizens and in our everyday lives. Countless individuals have developed personal and social goals and made decisions that have affected political and social events and have developed new ways of living and being.

This attitude is developed in schools when knowledge and skills are taught that foster self-directed learning and when schools allow students to feel as if they have some control over what happens to them. Schools can create personal causation climates that in the long run develop personal control attitudes and appropriate skills and knowledge. This climate occurs when students are

involved in classroom meetings; when they help solve school problems; when they learn goal setting skills, when they learn about individuals who changed the course of human events; when they focus on decision-making and conflict-resolution skills; when they are able to think and reason for themselves, and so on. The structure and boundaries for students are developed as the student's abilities to take charge of their own learning are assessed and evaluated. The greater the abilities of students to take responsibility for their own learning, the greater responsibility that is given to them. The more schools are able to do these things, the greater the likelihood of developing a personal causation attitude.

The Scientific Attitude

The scientific attitude involves a committment to the truth, alongside a committment to democratic method. The scientific attitude is antithetical to authoritarian values. It supports free, open inquiry, tolerance of difference, objectivity, the search for evidence, and flexibility, values that are encouraged and supported in a democratic society.[37]

Implicit in the process of science is an emphasis on the dignity of man. The scientific process values dissent and difference among reasonable people. It presupposes that, in the search for truth, differences in conceptions and theories developing over time will occur. It implies that, rather than destroying those who disagree with each other, the more natural and preferable course is to perform further experiment, collect greater evidence, and dialogue and communicate.

The scientific attitude includes a healthy skepticism about theories and ideas about man and nature. It attempts to focus on concepts and theories and raise questions about them looking towards experiment, observation and mental acuity as ways to further truth. It accepts questions, problems, dilemmas and ambiguities as natural, positive phenomena, and supports the search for tentative

hypotheses through reason and evidence. It often assumes failure and frustration will come before success, and accepts the fact that knowledge can only be built over time.

With a scientific attitude, generalizations are questioned. People try to come to conclusions carefully, objectively. They work cooperatively with others. They look at others as friends and allies, ready to help in the search for truth. They agree to disagree. Some of our fundamental Constitutional rights are basic to the scientific attitude, such as the right to dissent, to speak freely, and so on.

Schools can help foster scientific attitudes by encouraging rigorous intellectual thought. Schools can respect the right and integrity of people to think and believe differently from each other, encouraging humane discourse and cooperative learning. Students can be encouraged to disagree and dissent with each other and the teacher provided they can develop arguments with evidence for their positions. Teachers can create questions and dilemmas as starting points for learning, and encourage experimentation and observation. Multiple resources illustrating different points of view can be used. The history of scientific discovery can be incorporated into the school curriculum to trace differences in points of view and the use of scientific method over time.

Self-Acceptance and Self-Growth

There is a special attitude towards oneself that I believe is critical for effective future living. It combines self-acceptance with an attitude of self-growth. The self-accepting person is one who sees himself as an "O.K." person. He likes himself. He usually feels confident and capable. He does not overemphasize weaknesses. He is generally relaxed. This is in contrast to a person with a negative self-concept, who sees himself as a "Not O.K." person.

This person does not like himself. Much of his energies focus on self-blame and doubt. He may also continually blame others for things that happen.[38]

The self-accepting attitude is important for future living. It enables individuals to concentrate on situations and events, rather than on themselves. It enables a person to live through difficult times in which he or she may be blamed and criticized for his actions. Many individuals have had to speak out against the prevailing point of view in order to promote ideas they feel are important for future living, and a self-accepting person is more likely to be able to do this. Self-accepting people are also more likely to be able to concentrate on developing ideas, skills and attitudes important for future living.

An actitude of self-growth implies that people have a view of a changing self over time. While they accept themselves, they also see themselves as "improving" in many different ways. They are open to learning new skills and attitudes. They are willing to learn how to handle situations in better ways. They are willing to explore diverse career goals. They are willing to explore new ways of relating to people. They accept the fact that they will change as they pass through different stages of their lives. They feel that they are "O.K." but see themselves as changing and different, depending on their situation and stage of life.

Schools can help foster attitudes of both self-acceptance and self-growth. Using esteem and growth building activities and experiences, along with positive feedback and positive expectations, can foster both attitudes.[39] Fostering successful learning and individualized learning approaches take into account differences among students. Teacher considerations of student needs and other individual student factors can foster self-acceptance and self-growth.

Present and Future-Oriented Attitude

Schools have had a tendency to develop a "past", rather than present or

future attitude. For example, much of what students learn in social studies is in the form of historical knowledge. As Toffler says, when history reaches the present, learning stops.[40] Generally, there is little that students do in school to help them focus systematically on the present and the future.

However, it is important that schools spend much more time developing a present and future attitude towards learning. The school's purpose, in my view, is to prepare students for future living, and part of skillful future living is the ability to focus one's mental energies on both the present and the future. This does not mean that schools do not teach about the past, but only that the past, when taught, be used as a vehicle to deal with present and future issues.

Every effort should be made to develop a school curriculum whose explicit goals and purposes are to foster knowledge, skills and attitudes for future living. Future living themes can foster interdisciplinary learning. Historical times can be used to present a context for studying present and future problems and for looking at alternative lifestyles relevant to future living. Individuals in historical contexts can exemplify models for future living. Future studies courses can help students synthesize much of what is learned in schools through a focus on future problems, issues, dilemmas and decisions.

Caring

Finally, an important attitude to develop for future living is caring about others.[41] The caring quality is similar to a sense of "mutuality", a higher order stage of development.[42] Individuals with the caring quality have a basic sensitivity and understanding of others. They can emphathize with the feelings and needs of others. They can act to help others.

Patterns of Instruction for Future Living

Some fantastic visions of schools for the future have been developed. Computerized instruction and technological devices suggest many ways to revolutionize learning.[43] Other visions include significant institutional

changes in schools, such as eliminating the school as an educational institution[44] or making the school a more comprehensive educational institution.[45] However, these visions may blind us to the necessity of focussing on and carefully thinking about the knowledge, skills, and attitudes that are most helpful for living in the future effectively. While there are ways that technology and institutional changes can aid in learning, it is more important in my view to develop patterns of instruction that can effectively help children develop competencies for future living. Quality instruction does not depend on major new innovations, but rather on dedicated teachers and school personnel who, themselves, focus on ways to develop an effective instructional program. The traditional school model, I believe, is appropriate for an effective future living education program, although modifications may be helpful and useful. It is important for schools to first clarify what and how to teach as they think about changing the institutional structure of schools and/or using new innovations.

This paper suggests that schools should focus on knowledge, skills and attitudes that are important for future living. Instruction should aid the student to become more self-directing and more fully functioning. Future living literacy means that school focus on developing competencies so that students can become active citizens, make everyday living decisions, and reach their personal potential. There are many types of instruction that can aid the student as he or she faces the future, and many have been suggested here. Chart I outlines and reviews the knowledge and skill areas and attitudes suggested as critical for future living. The reader might want to look carefully at this chart and review these. The chart suggests that knowledge, skills and attitudes are intertwined in complex ways, and that developing curriculum programs and instructional techniques based on this model is a complex process. The model can serve as a starting point for exploring school curricula and instructional practices designed to enhance future living.

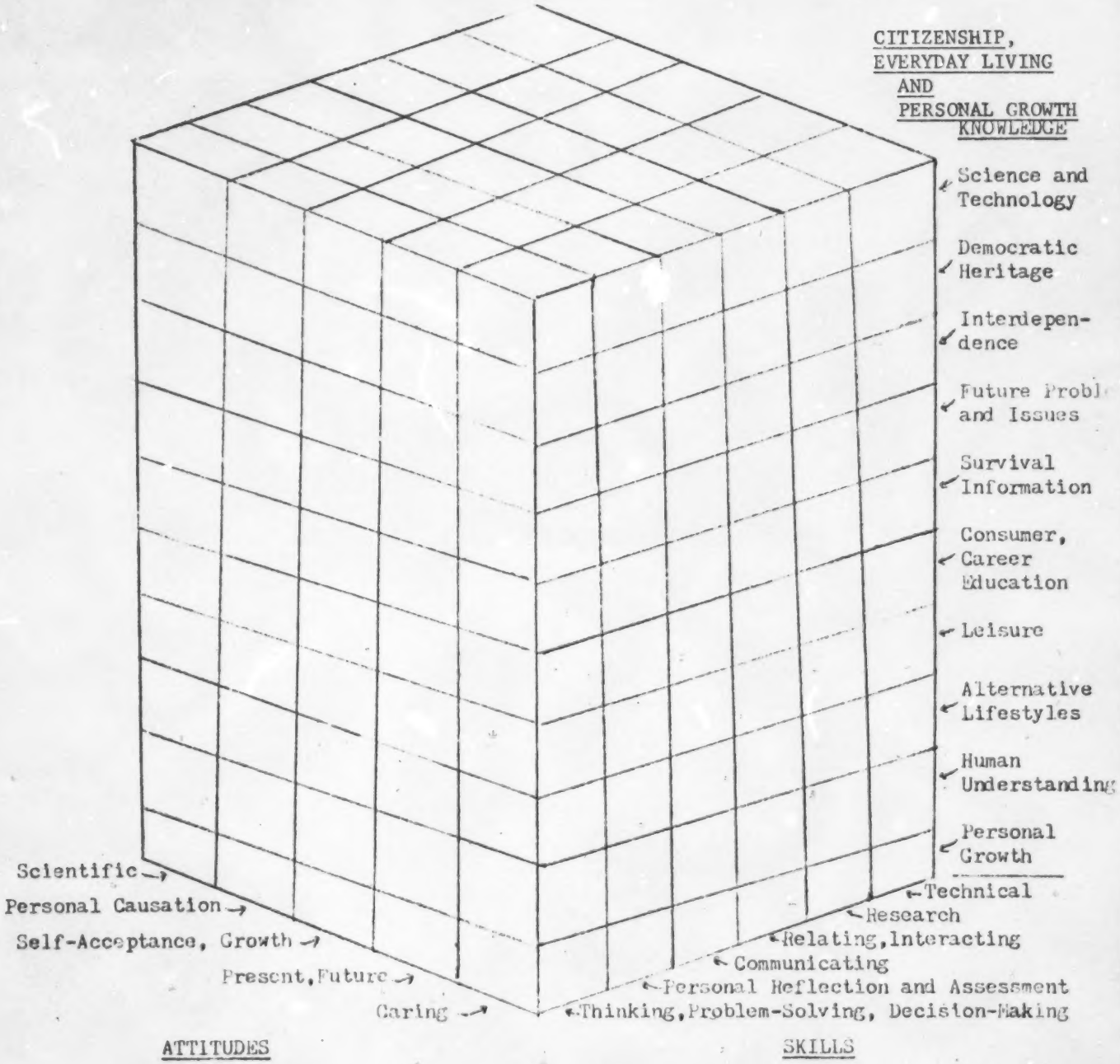

Chart I

A Matrix Summarizing Knowledge Areas, Skills and Attitudes
For A Future Living Education

In order to implement a complex future living program, it is imperative that schools and school districts clarify their goals and develop clear and systematic programs. My observations indicate that generally schools do not carefully and systematically design instruction for future living. Schools can and should begin to conceptualize their future living programs by establishing goal priorities and then deciding in what ways goals can be implemented at different grade levels and in different classrooms. Goals should be general and specific, maximizing ways that the achievement of goals can be measured.

For example, let us assume that a school district agrees that educating self-directed people for future living is an important general goal. Let us also assume that the district also agrees with the general competencies suggested here in the knowledge, skill and attitude areas, and has developed specific objectives around these. One way to proceed is to develop planning charts for knowledge, skills and attitudes to be developed, similar to chart II (see next page). In the chart II example, each knowledge area is listed separately, alongside grade levels. Next to each grade level the school personnel place those curricula programs or classroom practices that will be used to develop the knowledge areas. Some programs may be used for more than one area. Thus the school district may be using, or wish to use, a social studies program that includes many of the future living knowledge areas. The chart would list, for each grade level, the curriculum under the knowledge areas covered. Other school and classroom practices and experiences would also be listed in appropriate knowledge areas. Although not every knowledge area would be covered at every grade level, it would be expected that every knowledge area would be covered by the time a student reaches the twelfth grade. There may also be areas of overlap and repetition designed to reinforce specific knowledge, skills and attitudes or to teach different and more complex viewpoints at different grade levels.

CHART II

Sample Planning Chart

Knowledge Framework

Science and Technology	Democratic Heritage	Inter-Dependence	Problems and Issues	Consumer Career Education	Leisure	Alt. Life-styles	Hum. Under-standing	Personal Growth
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

In completing this chart, the school and school district can assess how its program focusses on future living knowledge. Similar charts for skills and attitudes do the same. As a result of this assessment, a school or school district can determine whether changes should be made in the curricula and instructional program so that other areas should be developed. Changes can also be included in the plan.

Once decisions are made about the knowledge, skills and attitudes to be explored at different grade levels, and about the general curricula and instructional patterns to be used, a more detailed plan can be developed for each grade level and/or each teacher (see chart III). The detailed plan does not necessarily include a daily plan or even a weekly, monthly or yearly plan, but indicates some of the curriculum areas and classroom practices that will be used to develop knowledge, skills and attitude competencies. The grade level plan includes specific indications of how teachers will develop competencies over time, and ways that these competencies will be assessed. These grade level plans, along with a general school overview, can be collated into a comprehensive school district plan. The comprehensive plan should include a general rationale, goals and objectives, a description of an overall future living program, an overview of a K-12 curricula and instruction planning sequence, and specific plans for each grade level. The comprehensive plan should be assessed, reviewed, and updated periodically, and assessments made on a regular basis as to whether students are in fact learning what they are expected to learn in a school for future living.

I believe that it is better if future living assessments and programs are developed as part of a comprehensive, systematic school or system-wide future living plan. However, sometimes it is necessary for an individual teacher, working on her own or with several others, to assess and plan her own future living knowledge, skill and attitude programs. Essentially this requires analysis

CHART III

Grade Level Plan

Grade _____

1. General description of goals, objectives and competencies: (related to general plan for future living)

2. Brief description of program and assessment techniques consistent with above:

3.

Activities and/or patterns of classroom life and/or curriculum	Knowledge Area	Skills	Attitudes
Social Studies (sample)	Community: careers, life-styles, government and laws, transportation, technology, services to others	Developing questions, collecting information, drawing conclusions classifying	Present and Future Caring About Others Scientific Attitude

Other classroom activities, practices - other comments

of school and community committments, focussing on ways they can be adapted and modified to better fit a future living program. Priority can be given to future living areas. Teachers can consider their own goals for their students and modify them and their programs should it be necessary to do so. Charts I and III provide potential guidelines for developing specific teaching plans. An individual teacher may also wish to act as a catalyst for a district-wide future living assessment, using chart II as a guide. A first important step is the development of a set of goals and priorities to which a teacher can become committed and work towards in the context of his or her school situation. A second step is discussions with parents, other teachers and school leaders about future living education and future living goals and priorities and programs.

Some Final Thoughts

There are several important ideas that should be considered when developing a plan for future living education. First, I think that certain types of knowledge should be emphasized, and schools should determine if their programs are geared to future living knowledge. Does a school, for instance, spend time focussing on citizenship knowledge? On everyday living knowledge? On personal growth knowledge? Are such areas as science and technology, career and consumer knowledge, alternative lifestyles, and so on included in the instructional program? These are several examples of the many questions that can be asked by educators as they explore whether their schools adequately promote knowledge for future living.

Second, a school district should determine whether there is strong enough emphasis on skills and attitudes for future living. Often schools purport to emphasize skills and attitudes but actual practices are inconsistent with future living skill and attitude goals. For example, many schools suggest that they promote thinking and problem-solving, but one is hard pressed to find examples of students using a variety of thinking skills, solving complex problems, and

making decisions. Both curricula programs and classroom instruction can directly promote such goals. Another example is found in schools where children have little opportunity to relate to and interact with each other, yet this is often considered an important school goal. It is paradoxical that often teachers will tell me that they cannot allow children to interact with each other in the classroom because the students do not know how to relate well to each other. How are they going to learn? A program that helps students to relate is most called for when students do not know and/or do not use relating skills.

I believe that schools can better organize themselves so as to provide maximum skill and positive attitude development. Mutual decision-making through classroom meetings can enhance feelings of personal causation. Promoting the right to disagree, find evidence, cooperate in learning tasks, intellectually challenge each other, etc. can promote scientific attitudes. "Caring" schools and teachers promote caring students.

Schools can also promote the development of skills and attitudes that gradually allow students to take greater responsibility for their own learning and become self-directed learners. Teachers in the lower grades can help students gradually learn skills and attitudes necessary for working on their own, evaluating their own learning, and even making some decisions about what they should learn. Schools promote this development when they emphasize contract learning, learning centers, small group experiences, learning packets, and so on. Non-graded schools also promote greater independence and responsibility. The gradual development of self-directed learning is successful when in high school most students can work independently, with teachers acting as facilitators of learning. Of course not all students will be ready for this type of learning in high school, and close monitoring of students can determine whether students need more or less guidance. But unfortunately, most school districts do not operate on this increased self-direction premise. High schools generally seem

to emphasize teacher-centered learning, negating the self-directed learning approach. It is helpful to develop a systematic plan that enables students over time to use their thinking, problem-solving, decision-making and other self-directed skills and attitudes and learn on their own, with the help and guidance of the teacher, as they progress through the grades. For example, an inter-disciplinary, thematic approach in high schools might help to make a less fragmented program and allow for self-directed skill and attitude development.

Third, schools can organize their programs to take into account their students' stages of development. For example, the elementary grades can focus on providing background knowledge, skills and attitudes prerequisite for advanced work. During the middle school-junior high school years, when students are dealing with questions of self-identity and can do more formal, advanced thinking, it may be appropriate to emphasize personal growth, reflection and assessment issues, through moral dilemmas, career questions and lifestyle issues. In the high school years more abstract themes, questions and issues contained in political issues and involvement, interdependence, future studies and the like can be studied. In any case, student interests, developmental levels, concerns, and so on should be continually considered as future living programs are developed.

Fourth, schools should emphasize active, experiential real world learning. Students should experience as much as possible in the real world as they learn knowledge, skills and attitudes for future living. Experiments, simulation games and role play, field trips, audio-visual experiences, interviews, speakers, camping trips, and internships are examples of such experiences. Case studies of individuals and groups can help provide examples and experiences relevant for future living. A greater experiential, real world emphasis will significantly aid in developing future living education.

Finally, assessment and monitoring of student competency progress is an

important technique for the success of a future living program. A competency based mastery approach, in which students are continually evaluated and assessed in formal and informal ways, can provide the backbone for a successful school experience.[46] Schools can plan to assess student competencies and place students in appropriate learning experiences. The last year or several years in school can be devoted to many types of experiences that are designed to use, reinforce and reemphasize skills learned earlier. For example, students can develop independent projects around a strong future living interest (e.g. careers of the future, technology, inventions, etc.). They can focus on relevant problems and simulation experiences related to future living. Questions and problems can be raised by the students and explored together. Field experiences can be developed to allow students to live in different settings in the "real world" -- occupational settings, alternative living settings, and the like. Students can focus on the concept of future living skills and assess whether they feel prepared for future living. Future studies courses can intensify their experiences. Small group and individual conferences can help teachers assess student progress.

Plans such as these do not develop overnight. They may take years to develop and may cost money. But schools have the opportunity to develop such plans at relatively low cost. Summers are ideal for thinking about future living goals and plans without the harried schedules of the school year. Teachers could be hired at relatively minimal cost to focus on these issues. School districts adjacent to each other can pool their resources to fund such planning. With such plans, teachers could clarify their own goals and see how their classroom program fits with a school and community conception of important elements for future living. It would become easier for schools to portray their goals and plans to the public, and would help schools and school districts continually clarify what they are doing and why. Mastery of these

knowledge and skill areas, as well as the development of appropriate attitudes, could be monitored and progress reported.

It is not my intention in this paper to argue that schools should be the only institution responsible for future living learning. Other institutions, such as the home, religious institutions, social agencies, also have a role to play. It is my intention to suggest that there are areas important for future living, and that schools have an obligation to determine what role they can play in preparing their students for future living. A carefully developed school program outlining the school's responsibilities and goals can help to clarify what roles different institutions must play in future living education. I believe, however, that schools must play a major role in that preparation, given the time and the resources devoted to schooling in our society. A carefully developed school program, defining what is and what is not school responsibility, may take years to develop, and would be well worth it. I believe that the resources of state and federal governments should be marshalled in an effort to help with this task. All would benefit, and progress could be made towards a quality education for all.

Footnotes

1. For example, see Herman Kahn, et. al. The Next 200 Years: A scenario for America and the World, New York: William Morrow and Co., Inc, 1976.

2. A pessimistic scenario is presented in Donella H. Meadows, Dennis L. Meadows et. al., The Limits to Growth, New York: The New American Library, 1974 (second edition).

3. The case for a simpler, voluntary lifestyle is presented by Duane S. Elgin and Arnold Mitchell, "Voluntary Simplicity: Lifestyle of the Future," in The Futurist, Volume XI, No. 4, August, 1977, pp. 200-209, 254-261.

4. See "Education for a World in Change: A Working Handbook for Global Perspectives," an entire issue of Intercom, #84/85, New York: Center for Global Perspectives, 218 East 18th St., New York, N. Y. 10003.

5. See Jib Fowles, "The Impending Society of Immortals," in The Futurist, Volume XII, No 3, June, 1978, pp. 175-184.

6. Edward Cornish, "Towards a Philosophy of Futurism," in The Futurist, Volume XI, Number 6, December, 1977, pp. 380-383.

7. See Fred Harwood and Elliott Seif, "Coping with the Here and Now: Teaching Survival Skills To Urban Students," in The Instructor, December, 1973, pp. 46-48; see also the Scout Skill Book series, North Brunswick, New Jersey: Boy Scouts of America 1976.

8. See, for example, Patrick Rivers, The Survivalists, New York: Universe Books, 1975; alternative lifestyles have also been explored in newspaper articles and magazine sources.

9. Ralph Ojemann, et. al., Education for Human Behavior, Handbooks K-VI, Cleveland: Educational Research Council of America.

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12. See Alvyn M. Freed, T.A. for Tots and T.A. for Kids, Sacramento, California: Jalmar Press, 1974.

13. For a summary of stages of moral reasoning and examples of dilemma situations for teaching purposes, see Ronald E. Glabraith and Thomas M. Jones, Moral Reasoning, Minneapolis, Minn.: Greenhaven Press, 1976.

14. Examples of self-actualizaed people and their characteristics are found in Maslow, Motivation and Personality, Chapter 11.

15. See, for example, John F. Kennedy, Profiles in Courage, New York: Pocket Books, 1957; also Margaret Truman, Woman of Courage, New York: Bantam Books, 1977.

16. See Hilda Taba, et. al., Thinking in Elementary School Children. Cooperative Research Project No. 1574. San Francisco, CA.: San Francisco State College, 1964; see also Norman E. Wallen, et. al., Teh Taba Curriculum Development Project in Social Studies, Menlo Park, CA: Addison Wesley Publishing Co., 1969.

17. The Taba Social Studies Program (curriculum materials for the elementary grades) Menlo Park, CA.: Addison Wesley Publishing Co.

18. Many sources are available for helping teachers stress thinking skills such as classification, interpretation, etc. See. For example, Louis Raths, etc. al., Teaching for Thinking: Theory and Application. Columbus, Ohio: Charles E. Merrill Publishing Co., 1967.

19. Ruth Noller, Sidney Parnes and Angelo Diondi, Creative Actionbook, New York: Charles Scribner's Sons, 1976.

20. Martin V. Covington, Richard S. Crutchfield, et. al., The Productive Thinking Program, Columbus, Ohio: Charles E. Merrill Publishing Co., 1972.

21. W.J.J. Gordon and Tony Poze, Making It Strange and Strange and Familiar, Cambridge, Mass.: Synectics Education Systems, 121 Brattle Street.

22. Dana G. Kurfman, editor, Developing Decision-Making Skills, Washington, D. C. 47th Yearbook of the National Council for Social Studies, 1977.

23. See, for example, Harold Berlak and Tim Tomlinson, People / Choices Decisions, New York: Random House.

24. Value Clarification sources include Louis Raths, Merrill Harmin and Sidney B. Simon, Values and Teaching, second edition, Columbus Ohio: Charles Merrill, 1978; Sidney Simon, Leland Howe and Howard Kershenbaum, Values Clarification: A Handbook of Practical Strategies, New York: Hart Publishers, 1972; Leland and Mary Martha Howe Personalizing Education: Values Clarification and Beyond, New York: Hart Publishers, 1975.

25. For example, see David and Frank Johnson, Joining Together: Group Theory and Group Skills, Englewood Cliffs, N. J.: Prentice-Hall, 1975; see also Gene Stanford, Developing Effective Classroom Groups, New York: Hart Publishers, 1977.

26. Ibid., p. 186

27. Ibid., P. 187

28. Ibid., P. 218

29. For conflict resolution information and ideas, see Barbara Stanford, editor, Peacemaking: A Guide to Conflict Resolution, New York: Bantam Books, Inc., 1977.

30. See for example, Thomas Gordon, Parent Effectiveness Training (P.E.T.) and Teacher Effectiveness Training (T.E.T.), New York: Peter Wyden and sons

31. See, for example, Donald Oliver and James Shaver, Teaching Public Issues in the High School, Boston: Houghton Mifflin Co., 1966; see also Fred Newman, Clarifying Public Controversy, Boston: Little, Brown and Co., 1970

32. See, for example, Richard DeCharms, "From Pawns to Origins: Toward Self-Motivation," in General Lesser, ed., Psychology and Educational Practice, Glenview, Illinois: Scott, Foresman, 1971; see also Alfred S. Alschuler, Teaching Achievement Motivation: Theory and Practice in Psychological Education. Middletown, Conn." Educational Ventures, Inc., 1970

33. Ibid.

34. See value clarification sources cited in footnote 24.

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37. See Jacob Bronowski, A Sense of the Future, Cambridge, Mass.: The MIT Press, 1977

38. See Harris, I'm O.K.--You're O.K.

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40. Alvin Toffler, Future Shock, New York: Random House, 1970, p. 374.

41. A caring curriculum was recently discussed by Claude Lewis, "learning to care", in the Philadelphia Bulletin, Wednesday, May 31, 1978, p. B9. He described a curriculum developed by Dorothy Kobak, a psychiatric social worker for the New York City Board of Education.

42. See Erik H. Erikson, Childhood and Society, Second Edition, New York: W.W. Norton, 1963. A recent discussion of mutuality and maturity can be found in David C. McLelland et.al., "Making It To Maturity", in Psychology Today June, 1978, pp. 42-53, 114.

43. See, for example, Philip Kotler, "Educational Packagers: A Modest Proposal", and Peter H. Wagschal, "Illiterates With Doctorates: The Future of Education in an Electronic Age", in The Futurist, Volume XII, No. 4, August, 1978, pp. 239-242, 243-244.

44. See, for example, Ivan Illich, DeSchooling Society, New York: Harper and Row, 1971.

45. For example, see Edward G. Olsen, The School and Community Reader, New York: The MacMillan Co., 1963 (especially section 8); also Maurice F. Seay and associates, Community Education: A Developing Concept, Midland Michigan: Pendell Publishing Co., 1974

46. See Benjamins. Bloom, Human Characteristics and School Learning, New York: McGraw-Hill, 1976; see also Benjamin S. Bloom, et. al., Handbook on Formative and Summative Evaluation of Student Learning, New York: McGraw-Hill, 1971